

## Compact Pressure Switch



measuring  
•  
monitoring  
•  
analyzing

KPH



- Rugged, Compact Design
- Long Cycle Life
- Ranges: Vacuum...6100 PSIG
- Suitable for Pneumatic or Hydraulic Applications
- Easily Adjusted Setpoint
- Standard Plug-in Connector



Order from: **C A Briggs Company**  
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## Compact Pressure Switch Model KPH

### Description

The KOBOLD KPH pressure switch is highly reliable, has a compact design, and is ideal for OEM installations. Its long cycle life and rugged mechanical design assure reliable service. The 8000 series is suitable for low to medium pressure monitoring of air, gases, lubricating oil, light fuels and many other types of compatible industrial media. The 8200 series is suitable for high pressure monitoring of lubricating oil, light fuels and many other types of compatible industrial media. The KPH snap-action switch comes standard with gold plated contacts which have a mechanical reliability equal to that of a reed switch. If a reduced contact life is acceptable for a specific application, the KPH surpasses reed switches in its capacity to switch AC loads up to 5 amps.



### Specifications

|                               |                                             |
|-------------------------------|---------------------------------------------|
| <b>Switching Range:</b>       | -14...0 to 580...6100 PSIG                  |
| <b>Switch Deadband:</b>       | Fixed                                       |
| <b>Media:</b>                 |                                             |
| <b>KPH-80xx:</b>              | Compatible gases or liquids                 |
| <b>KPH-82xx:</b>              | Compatible liquids only                     |
| <b>Media Characteristics:</b> | Non-depositing                              |
| <b>Max. Viscosity:</b>        | 1000 cSt                                    |
| <b>Repeatability:</b>         | ±4% of final value (±3% for vacuum)         |
| <b>Sensing Mechanism:</b>     |                                             |
| <b>KPH-80xx:</b>              | Diaphragm                                   |
| <b>KPH-82xx:</b>              | Piston                                      |
| <b>Fittings:</b>              | 1/4" FNPT Standard                          |
| <b>Optional:</b>              | G 1/4 (KPH-80xx)<br>7/16"-20 UNF (KPH-82xx) |
| <b>Wetted Parts:</b>          |                                             |
| <b>KPH-80xx:</b>              | Aluminum, (NBR or FKM)                      |
| <b>KPH-82xx:</b>              | Aluminum, Steel, PTFE, NBR                  |

### Temperature Rating (Ambient & Fluid):

|                          |              |
|--------------------------|--------------|
| <b>KPH-8021, 22:</b>     | 32...176 °F  |
| <b>KPH-8023, 24, 25:</b> | 14...185 °F  |
| <b>KPH-82xx:</b>         | -13...176 °F |

### Mechanical Data:

|                             |                            |
|-----------------------------|----------------------------|
| <b>Mechanical Life:</b>     | 1 x 10 <sup>7</sup> cycles |
| <b>Max. Switching Rate:</b> | 100/min                    |
| <b>Vibration:</b>           | 15 g max.                  |
| <b>Weight:</b>              | 0.44 lbs.                  |

### Electrical Data:

|                                                 |                                                |
|-------------------------------------------------|------------------------------------------------|
| <b>Electrical Connection:</b>                   | DIN 43 650A                                    |
| <b>Switch Type:</b>                             | Snap-action SPDT switch w/gold-plated contacts |
| <b>Min. Voltage:</b>                            | 6 VAC/VDC                                      |
| <b>Max. Voltage:</b>                            | 250 VAC, 30 VDC                                |
| <b>Max. Permanent Resistive/Inductive Load:</b> |                                                |
| <b>AC/DC:</b>                                   | 0.1 A                                          |
| <b>Switch Life:</b>                             |                                                |
| <b>@ 0.1A Load:</b>                             | ≥ 2 x 10 <sup>5</sup> cycles                   |
| <b>@ 5A Max. AC Load:</b>                       | Reduced Contact Life                           |
| <b>Ingress Protection:</b>                      | IP65                                           |

### KPH Ordering Information

| Range<br>(PSIG)                                                                | Deadband<br>(PSI) | Burst Pressure<br>(PSIG) | Material / Model Number |              |                   |
|--------------------------------------------------------------------------------|-------------------|--------------------------|-------------------------|--------------|-------------------|
|                                                                                |                   |                          | Aluminum/NBR            | Aluminum/FKM | AL/Steel/NBR/PTFE |
| -14...0                                                                        | 2.2...2.6         | 1150                     | -                       | KPH-8021     | -                 |
| 3...30                                                                         | 3...5             | 1150                     | -                       | KPH-8022     | -                 |
| 7...120                                                                        | 5...12            | 1150                     | KPH-8023                | -            | -                 |
| 15...230                                                                       | 6...17            | 1150                     | KPH-8024                | -            | -                 |
| 15...435                                                                       | 15...73           | 1150                     | KPH-8025                | -            | -                 |
| 70...1015                                                                      | 152...217         | 5800                     | -                       | -            | KPH-8221          |
| 150...2320                                                                     | 160...246         | 5800                     | -                       | -            | KPH-8222          |
| 360...3600                                                                     | 160...246         | 5800                     | -                       | -            | KPH-8223          |
| 580...6100                                                                     | 247...551         | 8700                     | -                       | -            | KPH-8224          |
| <b>Option Codes</b>                                                            |                   |                          |                         |              |                   |
| G 1/4" process connection in place of standard 1/4" FNPT (KPH-80xx only)       |                   |                          |                         |              | ..G               |
| 7/16"-20 UNF process connection in place of standard 1/4" FNPT (KPH-82xx only) |                   |                          |                         |              | ..S               |
| Splash protection cover for adjustment screw mechanism                         |                   |                          |                         |              | ..EC              |
| Hirschmann electrical connector with 1/2" NPT conduit electrical connection    |                   |                          |                         |              | ..C               |